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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|----------------|-----------------------------|-------------------------|------------------|--|
| 09/760,321 | 01/12/2001 | Markus Meyer | P-4355 | 2684 | |
| 75 | 590 06/11/2004 | | EXAMINER | | |
| Forrest Gunnis | | BULLOCK JR, LEWIS ALEXANDER | | | |
| Gunnison, McKay & Hodgson, L.L.P. Suite 220 | | | ART UNIT | PAPER NUMBER | |
| 1900 Garden Road | | | 2126 | | |
| Monterey, CA 93940 | | | DATE MAILED: 06/11/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application | No. | Applicant(s) | |
| • | 09/760,321 | | MEYER, MARKUS | |
| Office Action Summary | Examiner | | Art Unit | · · |
| | Lewis A. Bul | lock, Jr. | 2126 | |
| The MAILING DATE of this communication | appears on the c | over sheet with the | correspondence ad | dress |
| Period for Reply | | EVELE A MONTH | VO) | |
| A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, the maximum statutory provided in the period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event n. a reply within the statuto eriod will apply and will e statute, cause the applica | , however, may a reply be to ry minimum of thirty (30) da xpire SIX (6) MONTHS froi tion to become ABANDON | imely filed ays will be considered timely the mailing date of this co IED (35 U.S.C. § 133). | y. ommunication. |
| Status | | | | |
| 1) Responsive to communication(s) filed on _ | | | | |
| | ——· This action is nor | n-final. | | |
| 3) Since this application is in condition for allo | | | rosecution as to the | merits is |
| closed in accordance with the practice und | · | • | | • |
| isposition of Claims | • | | | |
| 4)⊠ Claim(s) <u>1-28</u> is/are pending in the applica | tion | | | |
| 4a) Of the above claim(s) <u>23-28</u> is/are with | | deration. | | |
| 5) Claim(s) is/are allowed. | | | | |
| 6)⊠ Claim(s) <u>1-22</u> is/are rejected. | | | | |
| 7) Claim(s) is/are objected to. | | | | |
| 8) Claim(s) 23-28 are subject to restriction an | nd/or election requ | uirement. | | |
| Application Papers | | | | |
| 9)☐ The specification is objected to by the Exar | minor | | | |
| · · | | objected to by the | Evaminer | |
| Applicant may not request that any objection to | | | | |
| Replacement drawing sheet(s) including the co | | | | ED 1 121/4\ |
| 11) The oath or declaration is objected to by the | • | - · · | - | |
| • | e Examiner. Note | the attached Office | e Action of form Fi | 0-132. |
| riority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for fore | eign priority unde | r 35 U.S.C. § 119(a | a)-(d) or (f). | |
| a)⊠ All b)□ Some * c)□ None of: | | | - | |
| 1. Certified copies of the priority docum | | | | |
| 2. Certified copies of the priority docum | | • • | | |
| 3. Copies of the certified copies of the | • | | red in this National | Stage |
| application from the International Bu | · · | | | |
| * See the attached detailed Office action for a | list of the certifie | d copies not receiv | ed. | |
| | | | | |
| ttachment(s) | | | | |
| Notice of References Cited (PTO-892) | | Interview Summar | | |
|) | | Paper No(s)/Mail D Notice of Informal | oate Patent Application (PTC |)-152) |
| Paper No(s)/Mail Date <u>8/19/02,10/1/03</u> . | 6) | | , and the second second | , |
| Patent and Trademark Office OL-326 (Rev. 1-04) Offic | e Action Summary | | art of Paper No./Mail Da | ate 2004060.9 |

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-22 are, drawn to object communication between a first program
 in a first execution environment and a second program in a second
 execution environment through a proxy, classified in class 719, subclass
 330.
 - II. Claims 23-28 are, drawn to a computer structure having a binary specification, classified in class 707, subclass 100.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as creating a bridge in a first execution environment and creating a proxy wrapping an interface to the limited functionality of the second software program in the second execution environment so that one enables interaction between the environments. See MPEP § 806.05(d).
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, different search, and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with Forrest Gunnison on June 07, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-10 and 12-22 are rejected under 35 U.S.C. 102(b) as being anticipated by "COM/CORBA Interworking" by Digital Equipment Corporation (DEC).

As to claim 1, DEC teaches a method for enabling a first software program (COM client) using a first binary specification (Com specification / Microsoft Interface Definition Language / Microsoft Object Definition Language) in a first execution environment (COM / OLE System) to employ a limited functionality of a second software program (Corba Server) using a second binary specification (Corba Specification / CORBA Interface Definition Language) in a second execution environment (CORBA System) (see fig. 3-1 on pg. 10; pgs 1-9), the method comprising: creating a bridge (COMCORBA Inter-working) in the first execution environment; and creating, in the first execution environment using the bridge, a proxy (Surrogate Server) wrapping an

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interface to the limited functionality of the second software program (reference to CORBA object) in the second execution environment (via the Surrogate COM Server Approach or the In-Proc Server Approach) (pg. 11-12).

As to claim 2, DEC teaches creating a first execution environment object including the second binary specification (via creating a COM surrogate object which wraps the interfaces of the CORBA object) (pg. 11-12).

As to claim 3, DEC also teaches that the CORBA object can communicate with the COM object via its CORBA surrogate object (pgs. 14-16). Therefore, DEC teaches creating a second execution environment object (via creating a CORBA surrogate object which wraps the interfaces of the COM object) including the first binary specification.

As to claims 4 and 5, refer to claims 1-3 for rejection.

As to claim 6, DEC teaches a method for using functionality in a second execution environment (CORBA System) in a first execution environment (COM / OLE System) comprising: calling a method in a proxy interface (IclassFactory::CreateInstance / pSomeInterface::function) in the first execution environment (COM / OLE System, via the COM/OLE Client); and converting the method call (transformation of arguments before forward request) by the proxy interface to a

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corresponding method call (CosLifeCycle::GenericFactory::create_object / SomeInterface::OperationName) for execution in the second execution environment (CORBA System, via invoking the CORBA object) (pgs. 11-16, in particular pg. 14, "Once the COM client is returned the interface pointer, it can begin performing operations on the object itself. Each time the COM client calls a member function on an interface pointer, the surrogate COM object will be contacted. The implementation of a member function may need to perform any required transformation of arguments (e.g. convert strings between UNICODE and ANSI) and then forward the request to the corresponding CORBA object.").

As to claim 7-10, DEC teaches dispatching the method call (request / IsomeInterface::function) for execution in the second execution environment to the second execution environment (CORBA System) by the proxy interface (COM Surrogate Server) wherein the parameters / results are converted between execution environments by a proxy interface (transformation of arguments / results before forward) (pgs. 11-16, in particular pg. 14, "Once the COM client is returned the interface pointer, it can begin performing operations on the object itself. Each time the COM client calls a member function on an interface pointer, the surrogate COM object will be contacted. The implementation of a member function may need to perform any required transformation of arguments (e.g. convert strings between UNICODE and ANSI) and then forward the request to the corresponding CORBA object.").

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As to claims 12-14, refer to claims 6-10 for rejection.

As to claims 15-17, reference is made to a program product that corresponds to the method of claims 1-3 and is therefore met by the rejection of claims 1-3 above.

As to claims 18-22, reference is made to a program product that corresponds to the method of claims 6-10 and is therefore met by the rejection of claims 6-10 above.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over "COM/CORBA Interworking" by Digital Equipment Corporation (DEC).

As to claim 11, DEC teaches communication between environments wherein one environment communicates with another environment through a proxy interface that translates method calls from one environment to another. DEC teaches that the environments are COM and CORBA. However, DEC does not teach that the environments use C++ programming language. Official Notice is taken in that the COM environment has C++ constructs and that it would be obvious to one skilled in the art

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that the COM environment is a C++ programming language execution environment that communicates with another environment.

Other Pertinent Prior Art of Record

International Publication Number WO 98/02814, herein MARCOS teaches a mediating component that maps a client object to a server object through proxy objects and stub objects wherein messages are translated between the two objects and that objects exist in different object models. The claims are conceivable met by this prior art also.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (703) 305-0439. The examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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